

AMENDMENTS TO THE CLAIMS

Please cancel Claim 1 without prejudice or disclaimer of the subject matter recited therein. Please amend Claims 2, 4-7, and 10-21 as follows.

Claim 1 (Canceled)

2. (Currently Amended) An image pickup apparatus according to claim + 14, wherein the first wavelength component is a representative wavelength of light of a first spectral distribution and the second wavelength component is a representative wavelength of light of a second spectral distribution which is different from the first spectral distribution.

3. (Previously Presented) An image pickup apparatus according to claim 2, wherein the first spectral distribution is a spectral distribution including a peak wavelength of a luminosity factor.

4. (Currently Amended) An image pickup apparatus according to claim + 14, wherein the first wavelength component is included in a spectral distribution including a peak wavelength of a luminosity factor.

5. (Currently Amended) An image pickup apparatus according to claim + 14, wherein the first and second wavelength components are two different color components among red, green, and blue.

6. (Currently Amended) An image pickup apparatus according to claim + 14, wherein said first and second optical systems comprise a filter for extracting said the first and second wavelength components, respectively.

7. (Currently Amended) An image pickup apparatus according to claim + 14, wherein each of said first and second optical systems comprises a single lens.

8. (Original) An image pickup apparatus according to claim 7, wherein said single lenses of said first and second optical systems are integrally formed of a glass material or a resin material.

9. (Previously Presented) An image pickup apparatus according to claim 8, further comprising:

a light shielding layer provided between said integrally formed single lenses.

10. (Currently Amended) An image pickup apparatus according to claim + 14, wherein each of said first and second optical systems comprises a single lens provided with an infrared radiation cutting filter.

11. (Currently Amended) An image pickup apparatus according to claim + 14, wherein each of said first and second optical systems comprises photochromic glass.

12. (Currently Amended) An image pickup apparatus according to claim † 14, wherein each of said first and second optical systems comprises a color purity correction filter.

13. (Currently Amended) An image pickup apparatus according to claim † 14, wherein each of said first and second optical systems comprises a filter whose transmission factor becomes smaller as the distance from an optical axis thereof becomes longer.

14. (Currently Amended) An image pickup apparatus according to claim †, comprising:

first and second image pickup portions for receiving at least a first wavelength component of an object light and a second wavelength component of the object light different from the first wavelength component, respectively;

first and second optical systems for projecting the object light onto said first and second image pickup portions, respectively, via different optical paths, said second optical system projecting the object light also onto said first image pickup portion; and

guide path forming portions arranged correspondingly with said first and second image pickup portions, respectively, so that each of said guide path forming portions receives the object light including the first and second wavelength components and provides different guide paths thereto, respectively, so as to guide the wavelength component from the optical system corresponding to each of said guide path forming portions among the received first and second wavelength components onto the image pickup portion corresponding to each of said guide path forming portions,

wherein, when a virtual object distance D [m] (m) is defined as a function of an image pickup angle θ [°] (°) of said first or second optical systems to be $D = 1.4 / \tan(\theta/2)$, an interval between optical axes of said first and second optical systems is set such that change in an interval between an object image of the first wavelength component received by said first image pickup portion and an object image of the second wavelength component received by said second image pickup portion between when an object is at the virtual distance and when the object is at infinity is smaller than a pixel pitch of said image pickup portions multiplied by two.

15. (Currently Amended) An image pickup apparatus according to claim 14, wherein said first and second image pickup portions are integrally formed.

16. (Currently Amended) An image pickup apparatus according to claim 14, wherein said first and second image pickup portions are formed in a plane shape.

17. (Currently Amended) An image pickup apparatus according to claim 14, further comprising:

a plurality of openings for taking in external light through said first and second optical systems.

18. (Currently Amended) An image pickup apparatus according to
~~claim 1, comprising:~~

first and second image pickup portions for receiving at least a first wavelength component of an object light and a second wavelength component of the object light different from the first wavelength component, respectively;

first and second optical systems for projecting the object light onto said first and second image pickup portions, respectively, via different optical paths, said second optical system projecting the object light also onto said first image pickup portion; and

guide path forming portions arranged correspondingly with said first and second image pickup portions, respectively, so that each of said guide path forming portions receives the object light including the first and second wavelength components and provides different guide paths thereto, respectively, so as to guide the wavelength component from the optical system corresponding to each of said guide path forming portions among the received first and second wavelength components onto the image pickup portion corresponding to each of said guide path forming portions,

wherein said guide path forming portions comprise a first filter for extracting the first wavelength component and a second filter for extracting the first wavelength component which comes through said first filter.

19. (Currently Amended) An image pickup apparatus according to
~~claim 1, comprising:~~

first and second image pickup portions for receiving at least a first wavelength component of an object light and a second wavelength component of the object light different from the first wavelength component, respectively;

first and second optical systems for projecting the object light onto said first and second image pickup portions, respectively, via different optical paths, said second optical system projecting the object light also onto said first image pickup portion; and
guide path forming portions arranged correspondingly with said first and second image pickup portions, respectively, so that each of said guide path forming portions receives the object light including the first and second wavelength components and provides different guide paths thereto, respectively, so as to guide the wavelength component from the optical system corresponding to each of said guide path forming portions among the received first and second wavelength components onto the image pickup portion corresponding to each of said guide path forming portions,

wherein each of said guide path forming portions comprises a first polarizing filter for transmitting the object light received by said first image pickup portion and a second polarizing filter of a same polarizing direction as that of said first polarizing filter for transmitting the object light which comes through said first polarizing filter.

20. (Currently Amended) An image pickup apparatus according to claim 1, comprising:

first and second image pickup portions for receiving at least a first wavelength component of an object light and a second wavelength component of the object light different from the first wavelength component, respectively;

first and second optical systems for projecting the object light onto said first and second image pickup portions, respectively, via different optical paths, said second optical system projecting the object light also onto said first image pickup portion; and

guide path forming portions arranged correspondingly with said first and second image pickup portions, respectively, so that each of said guide path forming portions receives the object light including the first and second wavelength components and provides different guide paths thereto, respectively, so as to guide the wavelength component from the optical system corresponding to each of said guide path forming portions among the received first and second wavelength components onto the image pickup portion corresponding to each of said guide path forming portions

wherein said guide path forming portions include a microlens for receiving the object light projected by said first optical system and guiding the object light to said first image pickup portion, said microlens receiving the object light projected by said second optical system onto said first image pickup portion and not guiding the object light to said first image pickup portion.

21. (Currently Amended) An image pickup apparatus according to claim 1, comprising:

first and second image pickup portions for receiving at least a first wavelength component of an object light and a second wavelength component of the object light different from the first wavelength component, respectively;

first and second optical systems for projecting the object light onto said first and second image pickup portions, respectively, via different optical paths, said second optical system projecting the object light also onto said first image pickup portion; and

guide path forming portions arranged correspondingly with said first and second image pickup portions, respectively, so that each of said guide path forming portions receives the object light including the first and second wavelength components and provides different guide paths thereto, respectively, so as to guide the wavelength

component from the optical system corresponding to each of said guide path forming portions among the received first and second wavelength components onto the image pickup portion corresponding to each of said guide path forming portions,

wherein said guide path forming portions include a micro lens for receiving the object light projected by said first optical system and guiding the object light to said first image pickup portion, said microlens being offset so as to receive the object light projected by said second optical system onto said second image pickup portion and not to guide the object light to said first image pickup portion.